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Mindful Assessment in Support of Student Learning

Eileen Kogl Camfield
University of California at Merced

Leslie Bayers
University of the Pacific

This article takes a critical look at inherited assessment practices, and explores alternative, more mindful approaches. Rather than just measure student performance levels at the end of a unit, educative assessment should provide information that can actually help improve student performance. Mindful assessment *is an embodied, affective, and cognitive experience that undergirds and celebrates the entire learning process. We propose and provide examples of dialectical evaluative practices that invite students into, guide students through, and take students beyond learning in the classroom in ways that honor their agency as whole persons.*

Assessment: a term that strikes dread in the hearts of many college teachers. Why? Recent conversation in a faculty learning community reveals answers: "I see assessment as almost a kind of busy work that gets in the way of my 'real' work of educating students; it's all about conforming to externally mandated standards and time-consuming data reporting that's never going to be used for anything, just stuck in some report somewhere," says one political science professor. "I'm always afraid that assessment will 'out me,' that my students won't measure up to those in other sections of the course I teach…and that'll come back to bite me when it comes time to renew my contract next semester," confesses a contingent faculty member. Such views are not uncommon. Research on attitudes toward assessment affirms that "faculty concerns about student learning outcomes assessment are manifold, encompassing worries over the reasons for and drivers of it, uncertainty over the ability to accurately measure learning, fears over the potential for the misuse of data, and concerns involving workload and work life in

times of diminishing resources" (Cain & Hutchings, 2015, p. 98). These observations suggest that, for some, assessment has drifted from its intended purpose: to give feedback on student learning in the context of a class or program for the purpose of continual educational improvement. How could the laudable intentions and benefits of assessment result in a practice that some see as constraining learning and impeding student and faculty relationship-building? One possible explanation for this discontinuity might be discovered through historical analysis of the assessment movement.

Contemporary American universities, including our assessment frameworks, operate within infrastructures developed under siloed medieval monastic hierarchies (Evans, 2015) that were refined during the 19th-century Industrial Revolution. As Davidson (2017) observes, "the methods we still use for evaluating student achievement were adopted from quantifiable measures of productivity developed for factories and the brand-new assembly lines" (p. 201). Later, positivist psychometricians of the 1960s aimed to strip the messy parts out of assessment, such "disturbing features as dissent, diversity, context-sensitivity, and ambiguity," reinforcing "a confusion of standards with standardization; of quality with uniformity; of consistency with excellence; of test scores with assessment" (Newkirk, 2009, p. 41). Aside from underscoring the antiquity of some contemporary assessment practices, we must ask: What does it mean when human beings seeking learning are subject to processes designed to maintain social orders and to mass-produce compliant and uniform machines? One result is *mindless assessment*.

The Greater Good Science Center at the University of California, Berkeley defines mindfulness as "a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment" (Greater Good, n.d.). They associate it with an acceptance of "what is," with a lack of judgment, and with compassion and gratitude. Rarely, it seems, are these kinds of concepts associated with assessment. Instead, traditional assessment is more about the past (predetermined learning outcomes) and the future (a student's competency or capability to perform to set standards), not the present. It is also usually seen as cognitive, not affective. Because of these foci, some fear that assessment does

not cultivate genuine curiosity or deep learning. In her second edition of *The Power of Mindful Learning*, Langer (2016) reaches a striking conclusion, based on decades of research: "Our schools are the problem. They unintentionally teach us to be mindless …. They teach us to seek or accept information as if it were absolute and independent of human creation" (p. xv). Langer's indictment articulates the assessment culture that feeds into our universities, a reality professors are sometimes compelled to replicate, whether due to unwieldy class sizes, accrediting body requirements, or even student expectations. As colleagues dedicated to forwarding both assessment practices and contemplative approaches, we are interested in taking a critical look at inherited assessment practices and exploring alternative, more mindful approaches. We support the notion that rather than just measure student performance levels at the end of a unit, educative assessment should provide information that can actually help *improve* student performance (Wiggins, 1998). At the same time, we seek dialectical evaluative practices that invite students into, guide students through, and take students beyond learning in the classroom in ways that honor their agency as whole persons. We see such approaches as forms of *mindful assessment*.

Mindful assessment does not adhere to one definition or describe one practice, but rather a creative variety of embodied, affective, and cognitive experiences that undergird and celebrate the entire learning process. Brené Brown (2015) defines creativity as "the act of paying attention to our experiences and connecting the dots so we can learn more about ourselves and the world around us" (p. 42). As such, mindful assessment is inherently a creative process that draws on instructor curiosity as an evaluative skill. One way of thinking about the concept is to consider it as academic assessment's "missing middle," falling somewhere in between predetermined learning outcomes (the past) and students' projected performance relative to set standards (the future). Instead, mindful assessment captures and supports "the now," students' messy wrestling with ideas and personal struggles as they transform from novices into experts—a process than can extend far beyond any discrete class. It is not intended necessarily to replace more traditional techniques, but we suggest it as an intentional practice to augment and

enhance assessment work by providing another window into students' experiences in our courses.

At the end of this paper, we offer some concrete examples of what mindful assessment might look like in practice. But first, let us build the case for why assessment needs more mindfulness.

MINDLESS ASSESSMENT (OR WHAT'S WRONG WITH RIGHT ANSWERS)

In the United States, the plethora of student assessments with "right answers" is at odds with the innovative, creative thinkers we aim to develop. As Davidson (2017) puts it, "We live in a time when the world's problems are of such magnitude that no one knows the answers. Yet in universities, we are still teaching as if we know. That's a deception" (p. 144). Additionally, "right answers" are context- and perspective-bound. The "wrong answers" that can compromise student scores on one test might be "right answers" from a different viewpoint (Langer, 2016, p. 134). Undeniably, there are times when it is absolutely appropriate to ask our students to demonstrate their knowledge of "right" answers. We also know that "active retrieval"—also known as testing—can aid memory and learning (Brown et al., 2014). However, as Markman and Duke (2016) note, "if avoiding the threat of doing poorly on tests is the primary motivator for learning, we've got a problem. Many kids begin to feel as if the whole point of school is to remember things long enough to do well on the next test" (p. 50). By teaching students to prioritize "right answers" and absolute truths, we hamper their ability to creatively problem-solve in uncertain contexts. We should thus seek out opportunities to encourage students to question binary assumptions, to engage with complexity, and to grapple with "wicked problems" that have no current or easy solutions. As Paul Hanstedt (2018) details, the design and assessment of "wicked" courses and learning activities that include thorny, evolving problems can help our students develop the ability to navigate the ambiguity they will undoubtedly face in the future.

Although grades and assessment are not the same thing—grades being used to *evaluate* a student's relative achievement within a class, and assessment being used to *improve* student learning (via construc-

tive feedback), courses, or programs depending on the degree to which students have met learning objectives (Barkley & Major, 2016)—they are easily conflated at the classroom level. Some faculty may draw false conclusions based on percentages of students earning certain grades on an assignment (e.g., "80% of my students earned As on that test; they must really have learned the material"), as if grades are accurately measuring outcomes. Moreover, grades are sometimes the only learning feedback students receive. Therefore, as we discuss mindless assessment, it is also worth taking a moment to look at a problem we call *heartless grading*. We are not suggesting that all grading is heartless or that every faculty member conflates grading and assessment, but rather that the grading system can feel like a heartless form of assessment to faculty and students alike. Nilson (2015) elaborates on myriad ways in which our current grading system in higher education works against students and faculty: it correlates weakly to both "the abilities, knowledge, and dispositions that the U.S. occupational structure values and rewards" (p. 3) and our own learning outcomes, adds to ever-increasing faculty workload, compromises the integrity of grades and academic rigor, and feeds student anxiety (pp. 1-9). Further, based on their analysis of the research on grading, Schinske and Tanner (2015) conclude that our traditional letter-grade system "can dampen existing intrinsic motivation, give rise to extrinsic motivation, enhance fear of failure, reduce interest, decrease enjoyment in class work, increase anxiety, hamper performance on follow-up tasks, stimulate avoidance of challenging tasks, and heighten competitiveness" (p. 161). They also echo and extend Nilson's observation on faculty workload, noting that "the time and energy spent on grading has been often pinpointed as a key barrier to instructors becoming more innovative in their teaching" (p. 165). Again, our intention is not to conflate grades and assessment, but rather to highlight that they are intertwined in an uncomfortable dance. Both grading and assessment become heartless when learning relationships amongst the human beings involved in the course are subverted by external standards and when value is communicated only by what is in the rubric.

Reform Strategies

In response to concerns such as these, many have called for assessment reform, most often in the form of using "multiple measures" to better capture layers of student attainment of desired learning outcomes, which has the added benefit of increasing confidence in subsequent academic program changes (Palomba & Banta, 1999, p. 17). There is also a strong movement to create "authentic assessment" that asks students to respond to "questions and problems that are meaningful and challenging…[in ways that allow them] to integrate their personal experiences with their academic learning" (Driscoll & Wood, 2007, p. 77) and that align with real-world experiences (Barkley & Major, 2016). Additionally, there have been attempts to craft more nuanced rubrics for a wider variety of learning. Most notably, the Association of American Colleges and Universities' 16 VALUE rubrics address skills as varied as teamwork, civic engagement, ethical reasoning, and foundations for lifelong learning (AAC&U, n.d.).

Another layer of concern about assessment has come from those committed to educational access. Traditional protocols can hurt the most vulnerable student populations most. While they can shine a light on inequity, they also can simultaneously reinforce it. For example, Montenegro and Jankowski (2015) aver: "The best way—maybe the only legitimate way—of determining educational quality is to regularly collect evidence of student accomplishment and to use that evidence to improve teaching and learning" (p. 3). Yet, as Darling-Hammond (2001) observes, traditional assessment methods often systematically discriminate against historically marginalized populations. Therefore, just *how* assessment is conducted is the focus of important scholarship. Darling-Hammond asserts that we need "performance-oriented assessments that develop higher-order skills" and must not use assessment "for sorting, screening, and tracking." She affirms that we should instead "develop and use assessment not for punishment but as a tool for identifying student strengths and needs as a basis for adapting instruction more successfully" (p. 225). Among her many recommendations is a call to include opportunity-to-learn components in assessment tools that could help define a standardized floor for core resources necessary for student learning.

Why We Need More Reform

However, while these reform efforts admirably challenge traditional assessment *processes*, most of them problematically continue to maintain focus on outcomes. Langer (2016) suggests that outcomes are in fact part of the issue, underscoring that "the capacity to achieve an outcome is different from the ability to explore the world and understand experience" (p. 117). Outcomes can offer useful checkpoints, but they can also create blind spots and shut down exciting discoveries—on the part of both teachers and students—in the learning journey. The assessment community's fixation on rubrics is a perfect illustration of this problem. Rubrics quantify components of the learning task and communicate those expectations to students. Yet the instructor-created rubric can simultaneously reduce the learning expectations to only those things that fall within those predetermined parameters and fail to invite students to co-create new knowledge.

While assessments and outcomes are often predetermined and siloed in schools and colleges, knowledge as it operates in the real world is not. Thus, as alluded to previously, mindless assessment and mindless rubrics fail to prepare students for the kinds of challenges they will encounter after they leave college—in their lives as citizens, in their workplaces, in their personal relationships. They must confront the "wicked problems" that beguile us in the 21st century (e.g., global warming, income disparity, etc.), which operate on multiple levels and require tolerance for ambiguity, mental flexibility, and the capacity to find creative solutions (Hanstedt, 2018). The consequences of this inability to think critically and compassionately are dire. One specific illustration emerges in the reviews of the kinds of clinical errors doctors make that "involve premature categorization—and thus a failure to recognize the uniqueness of a situation, or to sustain an attitude of suspended conclusion… [stemming from] the [un-nuanced] disregard of uncertainty" (Newkirk, 2009, p. 35). Such "one size fits all" approaches and haste to resolve cases are a consequence of mindless assessment, whereas mindful approaches would have prepared these professionals to wrestle with complex problems and explore more organic solutions.

Additionally, there is the question of the pervasive anxiety provoked by repeated high-stakes assessment. The educational community, taking its cues from psychology, once saw emotion and cognition as separate; findings in neuroscience now reveal that emotion is absolutely inseparable from cognition (Cavanagh, 2016). Yet we continue subjecting students to high-stakes testing at all levels, sparking continual "fight or flight" brain and body responses. "Test anxiety" has been a recognized phenomenon for some time, yet conventional assessment frameworks have not shifted to alleviate it. More broadly, Medina (2008) notes that, in addition to dire health consequences, "in almost every way it can be tested, chronic stress hurts our ability to learn," particularly "declarative memory…and executive function (the type of thinking that involves problem-solving)" (p. 178). We recognize that stress is a natural part of school, work, and life, that our students need to learn to negotiate challenges, and that small doses of stress can actually enhance motivation and develop resilience. At the same time, we question sustained mindless assessment that adds unnecessarily to cognitive load and attendant stress levels. We encourage educators to ask: What is the purpose of repeated, stress-inducing high-stakes testing? Is every test we subject our students to during the course of their schooling worth the academic anxiety and cognitive drain?

For faculty, it can be extremely stressful to be on the other end of high-stakes, mindless assessment. If one's performance review depends on student scores, faculty anxiety over student performance is compounded by a sense of being unable to directly control the result. Also, a faculty member could simply receive incorrect information about what students know because test anxiety has inhibited their ability to express the full depth and breadth of their learning. Thus, professors might feel bewildered, discouraged, or like failures after their students earn a set of low test grades, when in reality it is the assessment strategy that is the problem.

For students and faculty alike, the cognitive and emotional impacts of mindless assessment may include: a narrow understanding of right and wrong, dehumanization, inequity, competitiveness, anxiety, a focus on extrinsic motivation, and a fear of failure and the avoidance of activities that may lead to it. We refer to this as the mindless assessment

paradox. When isolated assessments are not part of an integrated learning experience and feedback loop, the very thing intended to measure student learning actually *forecloses* learning, reducing contemplation of nuanced and complex ideas to a "one and done" checklist.

ROOT PROBLEM: AN ACADEMIC CULTURE OF FEAR

So why has higher education stuck with mindless assessment for so long? Why has change been so slow? Indeed, why do we see a doubling down on "data-driven" decisions that in some cases seem to narrowly focus on numbers and leave out affect and context? Why has "accountability" in some institutions become associated with administrative scrutiny and the allocation of resources rather than something that might generate productive conversations about educational improvement? We see this issue as at least partially rooted in the culture of fear that permeates the academy. The skyrocketing cost of higher education has created a sense of financial insecurity and pressure to "do more with less"…in even less time. Accelerated programs promise to "get students through" an undergraduate degree in two or three years so that they are certifiably "career-ready" (higher education's version of "teaching to the test?"). Haste to "cover" material undermines meaning-making, deep learning, and intrinsic motivation. For faculty, competition over scarce resources creates pressure to quantitatively "prove" productivity, value, and merit in ways that are often reductionistic.

Unfortunately, when we are afraid, we become mindless and shut down (e.g., "outsourc[ing] planning to textbook companies who claim that their programs are research based, even 'guaranteed'" [Newkirk, 2009, p. 41]), become reactive, or revert to inherited practices that undercut our more generous or creative intentions. Some examples of such inherited practices include: prescriptive, standardized learning outcomes that are unquestioned and disconnected from what instructors most value (sometimes passed on from semester to semester as courses change instructional hands); quizzes aimed at 'catching' students who have failed to do their reading, which are inherently grounded in suspicion (as opposed to intentional uses of retrieval practice, which can boost learning, balanced by other methods); and exclusive adherence to the formulaic five-paragraph essay. As John Warner (2018) points out,

the five-paragraph essay "originally rose out of notions of 'correctness,' as opposed to classical rhetorical purpose or rhetorical forms," and proliferated as a predictable template that speeds evaluation (p. 28). In the process of facilitating teaching and assessment, this standardized container can hamper experimentation, discourage creativity, and communicate mistrust in students' abilities to discover the modes of discourse that best express their own voices. These are but a few examples of mindless assessment that we have noted in our own teaching repertoires and have ultimately questioned. Our consideration of the ways we have ourselves mindlessly assessed students has prompted us to explore alternative ways of doing things.

AN ALTERNATIVE: MINDFUL ASSESSMENT

The evolution of academic assessment from Industrial-Revolution-era ways of thinking to more modern concerns about inclusion, authenticity, and more varied domains of knowledge has demonstrated a positive commitment to serving a wider variety of students in more meaningful ways. In focusing on outcomes and competencies, the academy now encourages faculty to design courses more intentionally with specific goals in mind, to capture both formative and summative data in order to chart student relative growth, and to consider what skills students will need to be successful citizens and professionals. Specific benchmarks have been established in some domains and certain disciplines. Such effort to link past levels of academic preparation with future performance expectations takes us closer to a meritocratic ideal, but it is still missing the middle: the liminal space in which students wrestle with ideas and personal struggles as they transform over time from novices into experts. We need to know more about that experience in order to support students better. In short, we need to add mindfulness to the assessment cycle. While it may examine past performance and look towards desired outcomes, mindful assessment is grounded in the present. It savors the now. Mindful assessors proactively carve out a space for independence and authenticity within an educative ecosystem to create an embodied, affective, and cognitive experience that undergirds the entire learning process and honors student agency, seeing them as whole persons.

Mindful assessment means looking under the surface, being curious about the humans who undertook the learning, and embedding ourselves in a dialectical process.

What might this look like in practice? We share a few ideas below, but we do not presume to offer prescriptions or quick fixes. Rather, we propose each of us reflect on how we engage in our own assessment practices within our unique contexts at various types of institutions. The following suggestions, in other words, are intended to spark ideas, questions, and dialogue. We have also, where appropriate, included ideas from other scholars whose work exemplifies the kind of assessment practices we laud. Thus, we include them as practitioners who are already part of a conversation that might help frame and forward the next wave of assessment reform.

Reframed Outcomes and Rubrics

A first step in committing oneself to more mindful practices might entail interrogating and replacing disaggregated learning outcomes and traditional assessment tools. Consider Ron Ritchhart's (2015) suggestion to create a "culture of thinking" in our classrooms by building our classes around "big ideas" (e.g., international ethics, environmental stewardship, or writing for social change) that necessitate "richly integrated and connected knowledge…a web that becomes a vehicle for putting ideas to work and seeing the applicability of our skills in novel circumstances and in creation of new ideas" (p. 47). Such framing might encourage articulation of learning outcomes around "threshold concepts" (Meyer & Land, 2003), those concepts that fundamentally alter students' ways of thinking about a topic, as opposed to generating and assessing an atomized list of discrete skills. Thus, for the examples provided earlier, threshold concepts might be definitions of global justice, conservation, or audience. Framing course expectations around such learning and teaching for integrated understanding, not just knowledge-acquisition, might also necessitate approaching evaluation differently, finding ways to capture layered and nuanced student thinking: through one-on-one conferences, for example. Some, like Bob Broad (2003), seek to dismantle a scientific assessment paradigm and establish an inquiry-based "dy-

namic criteria map" instead of a rubric that provides "a workable method by which instructors and administrators in writing programs can discover, negotiate, and publicize the rhetorical values they employ when judging students' writing" (p. 14).

We have found the "fund of attention" rubric, developed by Camfield, Killick, and Lewis (2018), to be a humanistic tool for writing assessment. Rather than enacting judgmental language or editing protocols, evaluators (this can include instructors or peer reviewers) note why and to what degree their attention is activated or depleted during the reading process. This method encourages instructors and students alike to authentically note the positive in a piece of writing while also creating space to offer feedback on areas where more clarity, concision, precision, and so forth might reengage the readers' attention. This process reduces "insider-outsider" hierarchies (i.e., "I have the rhetorical tools/knowledge, you don't") and instead builds from the assumption that we are all readers, that we all know what activates reading engagement, and that we are collaboratively working to make a piece of writing stronger.

Another area to explore is more subtle assessment tools, techniques that themselves might be invisible to students but which give instructors valuable feedback on student learning. A simple show of hands (or poll) can help one gauge students' understanding during class. One can also design tasks in which students kick off class discussion or work together in groups to apply course concepts as a "softer," and thus less anxiety-producing, way of gathering information about student learning.

Educators might explore additional ways of inviting students into the assessment process. At the start of the semester, we can ask students to co-create course outcomes and rubrics, or we can go even further and embrace "emergent outcomes" (Stommel, 2017). Perhaps we find a middle ground, providing goals and regularly asking students what outcomes they are discovering through their learning. Similarly, we might consider allowing students to decide which work *they* feel best reflects their learning and evaluating that.

Feedback vs. Grades

In addition to rethinking the tools we use to evaluate student work, we can reconsider the data itself. First, we might inventory the types of as-

sessments we currently implement; are we using quizzes or five-paragraph essays, for example, for no other reason than habit? Do these activities allow students to show us what they know rather than simply shining light on what they do not know?

Alternatively, for writing assignments, we can consider asking students to self-annotate writing "moves." For example, while a student may not have fully realized an introductory "hook" in a piece of writing, by documenting an intention to create one, they allow their instructors to see that they understand the importance of such a rhetorical device. Self-annotation is an assets-based assessment strategy that allows us to move beyond looking for errors and, rather, lets us see otherwise invisible knowledge and aims. The more we are able to see the hidden workings of students' processes, the more we are able to activate empathy around more visible work.

Readers may also want to experiment with using and adapting for assessment purposes a form of contract-grading developed by Consilio and Kennedy (2019) called the "Mindful Grading Agreement Process" that includes looking for evidence of students' risk-taking, their respective rhetorical situations, and subsequent "achievable quality goals" as part of the evaluative process. Student work is accompanied by a great deal of reflective writing, which encourages instructors to focus on what is present in the students' writing, not on what is missing. The authors believe "applying a lens of mindfulness to evaluation—our MGAP—with its emphasis on quality of experience, and tuned into 'what is'—i.e. honoring each student's lived experiences and literacies with presence and non-judgment, inviting the student's whole person into the classroom—cultivates a pedagogy of balance and compassion" (p. 40).

Transparency

A third element of mindful assessment considers delivery. Many readers will be familiar with the concept of transparent teaching, or ensuring that students know how and why we are asking them to engage in particular learning activities. The Transparency in Learning and Teaching (TILT) project, spearheaded by Mary-Ann Winkelmes at the University of Nevada, Las Vegas, has gathered and analyzed evidence that compellingly

demonstrates how small steps toward greater transparency can offer notable gains in student success. (The TILT website also identifies—and offers a wealth of materials to guide—approaches to greater transparency.) Here we want to underscore the importance of transparent assessment as a crucial companion to transparent teaching. One of the core tenets of course design is to "begin with the end in mind," or to know what you hope students will learn before you start on a new unit and to design your lesson sequence accordingly. Explaining the ways in which you will be determining whether students have mastered material (using reframed outcomes and rubrics) is as important as being transparent regarding how those lesson sequences work together. Further, in sharing our rationales for teaching and assessing in particular ways, we offer students potentially agentic and motivating windows into the learning process.

Sequenced Reflection and Metacognition

Another element of mindful assessment involves intentionally sequenced reflection. Not just a pillar of mindful practice, reflection helps students operate metacognitively, to think about thinking. Because assessment anxiety can be rooted in weak self-efficacy, teaching students how to self-assess their knowledge, as part of the pre-assessment and continual learning cycle, can activate their sense of control over the material, their learning, and their performance (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010).

Before embarking on a new unit, ask students to reflect on what they already know about the new topic and inquire how they might optimize their new learning. Throughout the unit or activity, offer running commentary on class discussions, to indicate what modes of thought or disciplinary methods are in use. The TILT website, for example, suggests that we "explicitly connect 'how people learn' data with course activities when students struggle at difficult transition points." There are also many ways to engage metacognitive processes after assessments. Following a class activity, debrief. Ask questions like "What did you notice? How did that go? What did you learn? Why? How might you do it differently next time?"

Such techniques would not necessarily replace more formal assessment, but they can enhance it and communicate to students more personalized attention. Further, Schön (1983) insists that learning only happens when experiences, emotions, actions, and responses are reflected upon. Reflection knits theory and practice together, leading to deeper understanding. The two separate aspects of his reflective learning cycle—reflection-*on*-action and reflection-*in*-action—powerfully blend the metacognitive and affective, also emphasizing the connections between emotions, learning, and subsequent meaning-making in the educational experience. To further build on these ideas, we will emphasize embodied and affective elements in subsequent sections as the fifth and sixth pillars upon which mindful assessment is constructed.

Embodied Assessment

Centering and connecting. Centering activities can help students and instructors alike set aside distractions, ground their minds and bodies, and connect with one another. Emily Beals (2017) described her process for mindful assessment, which calls for instructors to take a couple minutes before evaluating each individual piece of student work to breathe and visualize the student. Subsequently, instructors should take breath breaks every 10-15 minutes as they work through a pile of student work in order to remain calm and mindfully detached. Such a teacher-focused centering activity can make evaluation into a compassionate, meaningful endeavor. Indeed, Beals's research shows qualitatively different responses to students' writing when this technique is used: instructors become more descriptive (reader-based) and less harshly judgmental.

A few minutes of guided breathing or writing at the beginning of class can also create a sense of calm focus for the day's tasks. Practicing such centering activities can help students savor the present moment, get in touch with how they are feeling about their learning, and develop habits that they might recruit to find calm and focus as they are completing complex or demanding assessments. Such practice also builds in Schön's (1983) "reflection in action" component. Moreover, these activities can also help to prime learning in ways similar to the "surgical pause," a focusing moment in an operating room immediately before incision

during which every member of the operating team verbally confirms the identity of the patient, the operative site, and the procedure to be performed. This simple means of ensuring clear communication among team members has dramatically reduced incidence of medical errors (World Health Organization, 2009). So, too, a brief pause to discuss your assignments' learning goals and your design rationale before diving into a new unit can help keep all learners on track. However, the effectiveness of this approach is to some extent contingent on each member of the class having a strong sense of belonging on the learning team. This necessitates being open about feelings.

Acknowledging Affective Aspects of Assessment

Community-building. Classroom activities organically become more meaningful when everyone in the room feels connected to and invested in the learning and in one another. Community-building activities, engaged at the beginning of the term and dynamically sustained throughout, create connections and establish trust both among students and between students and instructors. The degree to which community is established also impacts the levels at which students will respond to invitations to co-participate in class planning and reflection.

Additionally, dedicated community-building allows instructors to see students as whole people worthy of their compassion as well as their evaluation. This in turn can allow us to uncover "invisible learning" that may not come through on surface assessments. Seeing our students' humanity helps us break cycles of student shaming, allowing us to engage more empathetic narratives around student behaviors, including varying responses to assessment (Bayers & Camfield, 2018).

Any activity that helps and encourages students to engage in meaningful peer-to-peer dialogue promotes community. Community-building activities can include collective expectation-setting and the establishment of common ground at the beginning of the term. Community should also be deepened and sustained throughout the term. This can be accomplished through frequent incorporation of a variety of learning activities, such as structured team-based or small-group work, think-pair-share, gallery walk, collaborative writing, peer review, and more. Stephen

Brookfield's *Discussion as a Way of Teaching* (2005) offers excellent suggestions for those looking for ideas and guidelines. Community is also forged through actions and an environment that invites students to bring their whole selves in and be fully present. Classroom rituals (e.g., shared music, breathing practice, student-nominated quote-of-the-day, etc.), humor, and playfulness support both community and learning.

Research undertaken by Sable (2014) determined that "contemplative interaction," a culmination of mindfulness practice, journal writing, listening, inquiry, and dialogue, resulted in "a significant relationship between contemplative practices and the underlying affective dispositions for critical thinking" (p. 17). The researcher confirmed a strong correlation between contemplative practices and a deep sense of connected learning but was surprised to find that "many of the students felt more connected to each other based on their exploration of differences than based on holding similar views" (p. 15). In other words, contemplative practices and community can enhance one other in supporting the risk-taking and complex thinking inherent in mindful assessment.

Co-designed assessment methods. Co-designed assessments can flatten hierarchies, honor students as scholars in their own right, and reduce student anxiety over being evaluated. For example, in small groups, students might generate exam questions, which then get shared out to the larger group (on a real or virtual whiteboard, for example). From there, with instructor guidance, the class as a whole can deliberate, discuss, and edit questions. In addition to creating more ownership over the assessment, the co-designing process becomes a rich review and collaborative learning activity in and of itself.

Feedback instead of grades. Bowen and Watson (2017) put it pithily: "Feedback is essential for learning. Grades are not" (p. 127). Feedback emphasizes meaningful dialogue, process, and depth over what can be injudiciously reassuring or demoralizing letters. Heeding Jesse Stommel's (2018) call, some instructors are experimenting with "ungrading," which can include self- and peer-assessment, contract grading, student-designed rubrics, and additional alternative approaches. For institutional and other reasons, many of us feel unable to completely untether ourselves from grades. In such cases, how might we prioritize

feedback over grades? That might include the above-mentioned alternative assessment methods alongside grades. Bowen and Watson (2017) suggest returning assessments with written or video feedback first, walking students through a metacognitive reflection, and releasing grades later (pp. 134-135).

Celebrate error. No, really, we mean it. Make errors occasions for celebration. This involves more than just lip service; everyone knows the phrase "opportunity for growth" really means "you messed up." Instead, really embrace blunders, misconceptions, dead ends, fallacies, and delusions. These are essential elements of the learning process but are so often sources of shame. We suggest not just regularly acknowledging this point verbally, but making a day of it. Pick one day a month—perhaps an awkward date, like the 13th (because being wrong always feels a bit awkward)—to be "error appreciation day." Ask students to identify the biggest blunder they made over the course of the previous month and write a letter of gratitude to that mistake; emphasis should be placed on what caused the error and what it taught. Students could share these letters aloud, or not, to the extent they feel comfortable disclosing their mistakes. Thus, a somewhat silly day (great for community-building) can become a site for metacognition as well. More importantly, it normalizes error as part of the learning process.

Finally, as you read these suggestions for creating mindful assessment opportunities, you may have noted overlap between different elements. For example, where does metacognition end and affective self-reflection begin? How are centering activities different from community-building exercises? Our answers to such questions will emphasize the synergies amongst the multiple layers of mindful assessment. It is not a linear checklist but rather an organic, dialectical, and humanistic process-oriented approach to both understand and celebrate the student experience of our classrooms.

THE PAYOFF: GETTING IN TOUCH WITH A DIFFERENT TRADITION

Cognitive science has shown us that mindfulness not only helps people deal with stress, build relationships, and become more resilient; it also helps with self-regulation, improves focus, and increases the density

of brain regions linked to learning and memory. Not just good for student-learners, it is good for teachers too: "Teachers trained in mindfulness also show lower blood pressure, less negative emotion and symptoms of depression, less distress and urgency, greater compassion and empathy, and more effective teaching" (Greater Good, n.d.). Mindfulness (and mindful assessment) makes us feel more grounded and connected—and therefore less afraid. It is within those spaces of groundedness and connection that deep and transformative learning flourishes. Thus, a mindfulness orientation is better for students and better for us.

In the beginning of this piece, we shared quotations that illustrated the degree to which some instructors feel disconnected from and disillusioned by traditional assessment protocols—those with an insistence on objectivity and scientific validity. Those forms of assessment employ prescripted learning outcomes and measure student achievement in terms of fulfillment of those objectives, from which conclusions are made about likelihoods of students' future performance (or competence). As we stated previously, this is the mindless assessment paradox. When isolated assessments are not part of an integrated learning experience and feedback loop, the very thing intended to *measure* student learning actually *forecloses* learning, reducing contemplation of nuanced and complex ideas to a "one and done" checklist. Over the course of this article, we have attempted to suggest that mindfulness might be the "missing middle" that can link objectives/outcomes with competency in ways that might make assessment work better for instructors and their students. With our call for more personal and humanistic assessment methods, we hope to better support student learning and begin a conversation that might help frame and forward the next wave of assessment reform.

Such reform goals may not actually be *all* that radical—neither departing that far from tradition nor out of sync with practical real-world requirements. Much as we may have initially descried hierarchical monastic silos as the root of some of the problems associated with mind*less* assessment, mindfulness and contemplation are *also* part of medieval monastic tradition, though perhaps a different aspect of it. Author and self-styled practical philosopher Jules Evans (2015) tells us:

> A key part of any potential contemplative revival, it seems to me, involves building a contemplative culture within universities. In the Middle Ages, universities and monastic orders supported each other. But eventually, it became more of a zero-sum tussle for power and money.… The universities gradually put forward an instrumental model of knowledge which was sadly divorced from the ideals of contemplation, virtue and wisdom. That's partly why universities are in crisis today, in my opinion.

In turn, Karnes (2011) describes medieval culture as an age of imagination–where imagination was seen as a crucial intellectual resource. Today we need imagination more than ever. Hanstedt, (2018) sees it as necessary for solving wicked problems. Indeed, Tony Wagner (2018), senior research fellow at the Learning Policy Institute, names imagination as one essential survival skill for the 21st century as defined by business leaders. Creativity, collaboration, flexibility and adaptability are also highlighted as critical by the Partnership for 21st Century Learning (2016). Therefore, in some ways the assessment reform we are calling for is actually a return to the academy's "roots"—not the positivistic narrowing and hierarchical offshoots, but the unifying humanistic scion. In so doing we can support more meaningful present learning and better prepare students for their futures.

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